



Union Carbide Corporation  
A Subsidiary of The Dow Chemical Company  
P.O. Box 50  
855 Hwy. 3142  
Hahnville, LA 70057  
USA

September 23, 2020

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

7018-3090-0000-0036-0083

Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Emergency and Radiological Services Division  
Attn: SPOC  
P.O. Box 4312  
Baton Rouge, Louisiana 70821-4312

Re: Unauthorized Discharge Notification Report for Event of September 18, 2020  
Union Carbide Corporation, St. Charles Operations  
Agency Interest No. 2083  
EPA ID No. LAD041581422

Dear Sir or Madam:

On September 18, 2020, your office was notified of a release at Union Carbide Corporation, St. Charles Operations (refer to State Police Report 20-03647 and NRC Report 1287716). Enclosed is the written report pursuant to LAC 33:I.3925.A and 40 CFR §355.40(b).

Please contact Charles Cuti at 985-783-3729 if you have any questions or need additional information. All written correspondence should be sent directly to Scott White, Responsible Care Leader at P.O. Box 50, Hahnville, LA 70057.

Sincerely,

George Cerame  
Organizational Effectiveness & EH&S Delivery Leader

Enclosures

cc: LDEQ Southeast Regional Office

## UNAUTHORIZED DISCHARGE NOTIFICATION REPORT

Submitted to Louisiana Department of Environmental Quality  
in accordance with LAC 33:I.3925 and 40 CFR §355.40(b)

1. **Name, address, telephone number, Agency Interest (AI) number if applicable, and any other applicable identification numbers of the person, company, or other party who is filing the written report, of person, company, or other party who is filing the written report:**

Union Carbide Corporation (AI 2083)  
A Subsidiary of The Dow Chemical Company  
P.O. Box 50  
Hahnville, Louisiana 70057

Please contact Charles Cuti at 985-783-3729 if you have any questions or need additional information. All written correspondence should be sent directly to Scott White, Responsible Care Leader at P.O. Box 50, Hahnville, LA 70057.

2. **Time and date of prompt notification, the state official contacted when reporting, the name of the person making that notification, and identification of the site or facility, vessel, transport vehicle, or storage area from which the unauthorized discharge occurred:**

<u>Time</u>	<u>Date</u>	<u>State Official Contacted</u>	<u>Verbal Notification by</u>	<u>Site/Facility</u>	<u>Case Number or Comments</u>
02:10 PM	09-18-20	Dana Hart	Andrew Rodrigue	St. Charles Operations	20-03647

3. **Date(s), time(s), and duration of the unauthorized discharge and, if not corrected, the anticipated time it is expected to continue:**

Discovery Date:	09-18-20	Discovery Time:	01:20 PM
Start Date:	09-13-20	Start Time:	02:45 PM
End Date:	09-18-20	End Time:	01:45 PM
Duration of Event:	120 hours		

4. **Details of the circumstances (unauthorized discharge description and root cause) and events leading to any unauthorized discharge, including incidents of loss of sources of radiation, and if the release point is subject to a permit:**

- a. **current permitted limit for the pollutant(s) released**
- b. **permitted release point/outfall ID, and**
- c. **which limits were exceeded (SO2 limit, mass emission limit, opacity limit, etc.) for air releases**

On 09-18-2020 at approximately 01:20 PM, an Ethylene Oxide vapor leak was discovered on Reactor C-1101 (EQT 479). The leak was the result of a failed agitator seal. Upon receiving an alarm indicating a pressure loss in the reactor, the plant immediately cut off feeds to the reactor and stopped the leak. The leak was stopped at 1:45 PM. It is estimated that 859 pounds of Ethylene Oxide was released to the atmosphere from 9-13-2020 through 9-18-2020.

5. Common or scientific chemical name of each specific pollutant that was released as the result of the unauthorized discharge, including the CAS number and U.S. Department of Transportation hazard classification, and best estimate of amounts of any or all released pollutants (total amount of each compound expressed in pounds, including calculations), and an indication of whether it is an extremely hazardous substance [EHS]:

September 13, 2020				
Chemical Name	CAS Number	DOT Hazard Class	EHS	Amount (lbs)
Ethylene Oxide	75-21-8	2.1, 2.3	Yes	156

September 14, 2020				
Chemical Name	CAS Number	DOT Hazard Class	EHS	Amount (lbs)
Ethylene Oxide	75-21-8	2.1, 2.3	Yes	88

September 16, 2020				
Chemical Name	CAS Number	DOT Hazard Class	EHS	Amount (lbs)
Ethylene Oxide	75-21-8	2.1, 2.3	Yes	232

September 17, 2020				
Chemical Name	CAS Number	DOT Hazard Class	EHS	Amount (lbs)
Ethylene Oxide	75-21-8	2.1, 2.3	Yes	247

September 18, 2020				
Chemical Name	CAS Number	DOT Hazard Class	EHS	Amount (lbs)
Ethylene Oxide	75-21-8	2.1, 2.3	Yes	136

Note: The plant was shut down on September 15, 2020 due to expected impact from Hurricane Laura

6. Statement of actual or probable fate or disposition of the pollutant or source of radiation and what offsite impact resulted (including medium into which the release occurred):

Reactor vapor containing Ethylene Oxide was released to the atmosphere. There was no offsite impact from this release. Area monitors located along the site boundary did not detect that ethylene oxide was present. The parameters monitored were LEL, CO<sub>2</sub>, H<sub>2</sub>S, O<sub>2</sub>, and VOC.

7. Remedial actions taken, or to be taken, to stop unauthorized discharges or to recover pollutants or sources of radiation:

The leak was identified via online pressure monitors located on the reactor. Upon receiving an alarm indicating a pressure loss in the reactor, the plant immediately cut off feeds to the reactor and stopped the leak.

8. Procedures or measures which have or will be adopted to prevent recurrence of the incident or similar incidents, including incidents of loss of sources of radiation:

The reactor has been taken out of service for repair.

9. **If an unpermitted or unlicensed site or facility is involved in the unauthorized discharge, a schedule for submitting a permit or license application to the department, or rationale for not requiring a permit or license;**

Reactor C-1101 (EQT 479) where the release occurred is permitted under the EPARK Title V Permit 2446-V6.

10. **The reporting party's status (former or present owner, operator, disposer, etc.);**

Union Carbide Corporation is the present owner and operator of this facility.

11. **For discharges to the ground or groundwater, the following information shall also be included: all information of which the reporting party is aware that indicates pollutants are migrating, including, but not limited to, monitoring well data; possible routes of migrations; and all information of which the reporting party is aware regarding any public or private wells in the area of the migration used for drinking, stock watering, or irrigation:**

This release did not impact ground or groundwater.

12. **What other agencies were notified:**

Agency	Person Notified	Case Number (if provided)
NRC	Mark Kisich	1287716
State Police	Dana Hart	20-03647
St. Charles DEP	Lee Hebert	Not provided

13. **Names of all other responsible parties of which the reporting party is aware:**

Not applicable for this event.

14. **A determination by the discharger of whether or not the discharge was preventable, or if not, an explanation of why the discharge was not preventable:**

The discharge was preventable. A Root Cause Investigation (RCI) will be conducted to evaluate the circumstances that led to the release and the appropriate preventative measures.

15. **The extent of injuries, if any:**

There were no injuries associated with this event.

16. **Estimated quantity, identification, and disposition of recovered materials, if any:**

No recovered materials to report.

17. **Any known or anticipated acute or chronic health risks associated with the emergency and, where appropriate, advice regarding medical attention necessary for exposed individuals.**

There are no known or anticipated acute or chronic health risks associated with this event.

**18. Proper precautions to take as a result of the release, including any offsite protective action (road closure, shelter-in-place, evacuation, or none):**

There were no precautionary measures necessary as a result of this release.